



# HEXAGON TRANSPORTATION CONSULTANTS, INC.

## Memorandum

**Date:** September 16, 2014  
**To:** Ms. Karen Mack  
**From:** Michelle Hunt  
Ling Jin  
**Subject:** Traffic Operations Analysis for the Proposed Day Care Center at 2510 Klein Road in San Jose, California

Hexagon Transportation Consultants, Inc. has completed the traffic operation analysis for the proposed day care center at 2510 Klein Road in San Jose, California. The proposed project would convert a single-family detached residence to a 5,039 s.f. day care center that would enroll up to 68 preschool children. The project site would be accessed by one inbound driveway and one outbound driveway on Klein Road. The proposed day care center would operate between the hours of 7:00 AM and 6:00 PM Monday through Friday. Unlike an elementary school where student arrivals peak immediately before and after classes start and end, student drop-off and pick up times at the proposed day care center are expected to be more dispersed and vary by child depending upon the parent's schedule.

The purpose of this traffic study is to estimate the net new trips generated by the project and to evaluate traffic operations at the intersection of Klein Road and Murillo Avenue and at the project driveways. Hexagon also reviewed the project site plan to determine the overall adequacy of the site access and on-site circulation including drop-off and pick-up in accordance with generally accepted traffic engineering standards and to identify any access or circulation issues that should be improved. Parking was evaluated relative to the City of San Jose Parking Code.

### Project Trip Generation

Through empirical research, data have been collected that quantify the amount of traffic produced by common land uses. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. The trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 9<sup>th</sup> Edition* (2012) for Day Care Center (Land Use 565) were used to estimate the project trips generated by the proposed project. The trips generated by the existing residential unit were estimated using the trip generation rates for Single-Family Detached House (Land Use 210). The trips generated by the one residential unit were subtracted to get the net new project trips added by the proposed day care center.

As shown in Table 1, the project is estimated to generate 282 net new daily vehicle trips, with 53 net new trips occurring during the AM peak hour and 53 net new trips during the PM peak hour.

### Project Trip Distribution and Assignment

The trip distribution pattern for the proposed day care center was based on the current travel patterns on the surrounding roadway system and the locations of complementary land uses. It was assumed that 50 percent of the project trips would travel to and from Murillo Avenue and the other 50 percent would arrive and depart to and from the south via Klein Road.

The peak-hour trips generated by the proposed project were assigned to the roadway system in accordance with the trip distribution pattern discussed above.

**Table 1**  
**Project Trip Generation Estimates**

Land Use /b/	Size	Units	Daily Rate /a/	Daily Trips	AM Peak Hour				PM Peak Hour			
					Pk-Hr Rate /a/	In	Out	Total	Pk-Hr Rate /a/	In	Out	Total
Proposed												
Day Care Center /c/	68	students	4.29	292	0.79	29	25	54	0.79	25	29	54
Existing												
Single-Family Residence /d/	-1	d.u.	9.52	-10	0.75	0	-1	-1	1.00	-1	0	-1
Total Trips				(10)		0	(1)	(1)		(1)	0	(1)
Net Total Trips				282		29	24	53		24	29	53
Notes:												
/a/ Rate per student or per dwelling unit (d.u.).												
/b/ All rates are from: Institute of Transportation Engineers, <i>Trip Generation Manual</i> , 9th Edition.												
/c/ Land Use Code 565: Day Care Center (fitted curve equation).												
/d/ Land Use Code 210: Single-Family Detached Housing (average rates).												

## Intersection and Roadway Operations

The levels of service at the intersections of Klein Road/Murillo Avenue and Klein Road/Project Driveway were calculated under existing and existing plus project conditions (see Table 2). The results of the level of service calculations show that under project conditions, the delay for the worst stop-controlled approach at both intersections would continue to be minimal during the peak hours. The level of service calculation sheets are attached to this memorandum.

**Table 2**  
**Intersection Level of Services**

Intersection	Peak Hour	Existing		Existing Plus Project	
		Delay <sup>1</sup> (sec/veh)	LOS	Delay <sup>1</sup> (sec/veh)	LOS
Klein Road and Murillo Avenue	AM	8.9	A	9.0	A
	PM	9.0	A	9.1	A
Klein Road and Project Driveway	AM	9.2	A	9.3	A
	PM	9.1	A	9.3	A
<b>Notes:</b>					
<sup>1</sup> Worst approach delay was reported for these two-way stop intersections.					

Klein Road is a local residential street with a posted speed limit of 25 mile per hour. Hexagon conducted 48-hour tube counts on Klein Road just south of Murillo Avenue to measure the average daily traffic volume on that segment. The average daily traffic volume on Klein Road is approximately 910 vehicles under existing conditions. The project is expected to add 282 daily vehicle trips, half of which are expected to use the portion of Klein Road north of the project site and the other half of the project trips are expected to use the portion of Klein Road south of the project site. The addition of project trips would increase the existing daily traffic volume on Klein Road by approximately 16 percent to approximately 1,050 vehicles per day. The estimated traffic volumes on Klein Road with the project would be within the expected range for a local residential street.

## Queuing Analysis

The analysis of project intersection levels of service was supplemented with a queuing analysis of the northbound approach at the intersection of Klein Road and Murillo Avenue, the southbound approach at Klein Road and the inbound project driveway, and the on-site stacking at the outbound project driveway.

Vehicle queues were estimated using a Poisson probability distribution. The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95<sup>th</sup> percentile maximum number of queued vehicles for a particular approach; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement.

Table 3 shows that the queue on the northbound Klein Road approach to Murillo Avenue would be only one vehicle long and would not block any driveways including the project driveway. The proposed site plan shows the inbound driveway would be located at approximately 50 feet south of the outbound driveway. The queuing analysis showed that at most one car would stop on southbound Klein Road while waiting to turn left into the project site, which would not block the outbound driveway. Furthermore, the queue on the outbound project driveway (westbound approach) would also be no more than one car long. Based on the proposed site plan, there would be enough space at the outbound driveway for one car to wait for a gap in traffic on Klein Road without interfering with on-site circulation or parking maneuvers.

## Site Access and On-Site Circulation

A review of the project site plan was performed to determine whether adequate site access and on-site circulation would be provided. This review was based on the site plan provided by Kamachi Design + Architecture dated July 14, 2014 (see Figure 1).

### Site Access

The site access was evaluated to determine the adequacy of the site's driveways with regard to the following: traffic volume, delays, vehicle queues, truck access, pedestrian and bicycle access.

The site plan shows that the project site would be accessed by one inbound driveway and one outbound driveway on Klein Road. The outbound driveway, which is located approximately 150 feet south of Murillo Avenue, would serve 25 vehicles during the AM peak hour and 29 vehicles during the PM peak hour. That is an average of about one car every two minutes. The queuing analysis shows that there would be only one car waiting to turn right or left at the outbound driveway and the delays would be minimal during both AM and PM peak hours. As specified in the project description, student drop-off and pick up times at the proposed day care center are expected to be dispersed and vary by child depending upon the parent's schedule. Therefore, the driveway would work well. Klein Road is a neighborhood street with a low volume of traffic. The addition of project traffic would be accommodated easily.

The inbound driveway is located approximately 50 feet south of the outbound driveway. The inbound driveway is expected to serve 29 vehicles during the AM peak hour and 25 vehicles during the PM peak hour. The queuing analysis for the southbound Klein Road approach at the project driveway indicates that there would be only one car waiting to turn left into the project site, which would not block the outbound driveway.

The inbound driveway is measured at 19 feet wide and the outbound driveway is measured at 12 feet wide. Per the City's comments, the width of the inbound driveway should be reduced to 12 feet to clearly depict the intended one-way flow.

There would be two parallel parking spaces in front of the building. Commercial vehicles and delivery trucks would be able to enter the site and use the parking area on the east side of the building or the parallel parking spaces in front.

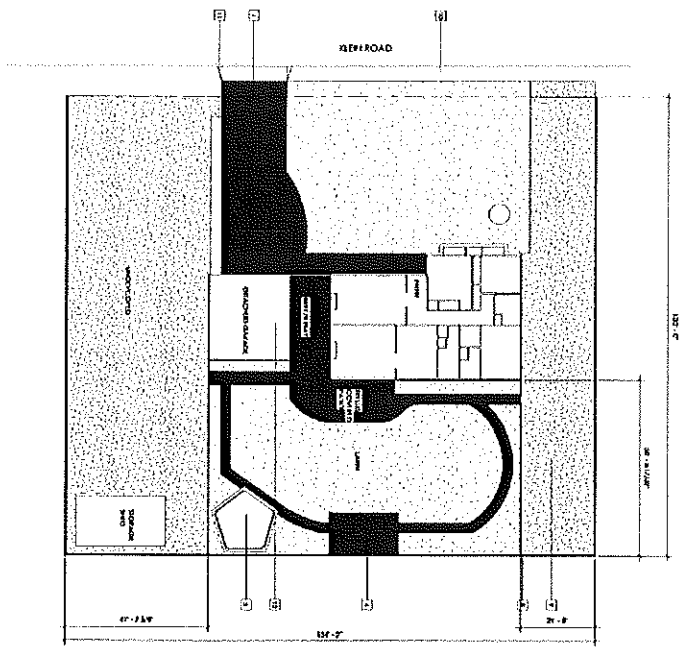
As proposed, garbage trucks would not enter the site. Trash bins will be rolled to the street for pick up in advance of collection.

**Table 3**  
**Queuing Analysis**

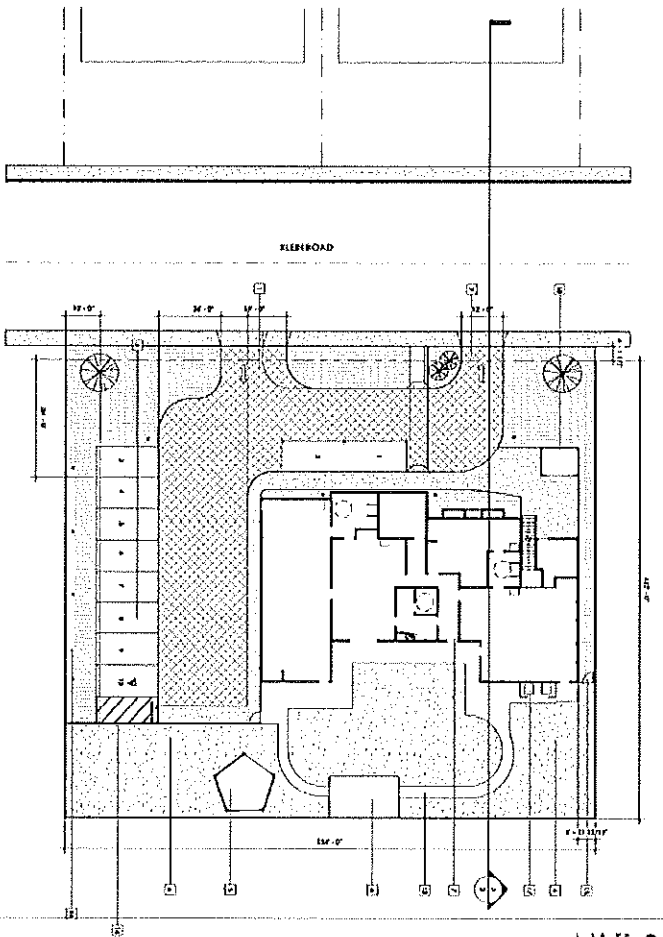
Approach Peak Hour Period:	Klein Road & Murillo Avenue		Klein Road & Project Driveway			
	NB AM	NB PM	WB AM	WB PM	SB AM	SB PM
<b>Existing</b>						
Delay <sup>1</sup> (sec)	8.9	9.0				
Volume (vphpl)	50	26				
Avg. Queue (veh/ln.)	0.1	0.1				
Avg. Queue <sup>2</sup> (ft./ln.)	3	2				
95th % Queue (veh/ln.)	1	1				
95th % Queue (ft./ln.)	25	25				
Storage <sup>3</sup> (ft./ln.)	150	150				
Adequate (Y/N)	Y	Y				
<b>Existing Plus Project</b>						
Delay <sup>1</sup> (sec)	9.0	9.1	8.9	8.8	7.3	7.3
Volume (vphpl)	62	41	25	29	29	42
Avg. Queue (veh/ln.)	0.2	0.1	0.1	0.1	0.1	0.1
Avg. Queue <sup>2</sup> (ft./ln.)	4	3	2	2	1	2
95th % Queue (veh/ln.)	1	1	1	1	1	1
95th % Queue (ft./ln.)	25	25	25	25	25	25
Storage <sup>3</sup> (ft./ln.)	150	150	25	25	50	50
Adequate (Y/N)	Y	Y	Y	Y	Y	Y
<b>Notes:</b>						
<sup>1</sup> Vehicle queue calculations based on movement delay for unsignalized intersections.						
<sup>2</sup> Assumes 25 feet per vehicle queued.						
<sup>3</sup> NB approach storage is the distance between Murillo Avenue and the project driveway.						
WB approach storage is the distance between the back of sidewalk and the nearest parking space.						
SB approach storage is the distance between the outbound project driveway and the inbound project driveway.						

The roadways in the vicinity of the project site include sidewalks that provide adequate access for pedestrians walking to and from the site.

Bike lanes are provided on Tully Road west of Ruby Avenue and on Ruby Avenue south of Tully Road. Although Murillo Avenue and Klein Road do not have bike lanes, traffic volumes and speeds on these streets are low, which facilitates shared lane use by bikes and vehicular traffic.



1 EXISTING SITE PLAN  
1/8" = 1'-0"

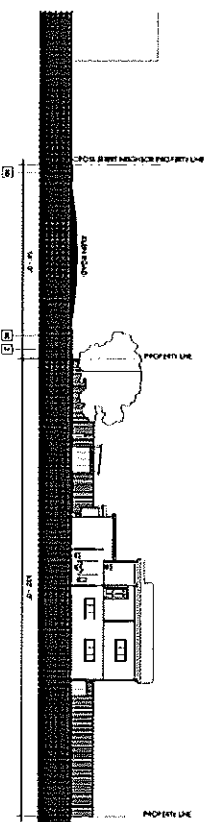


2 PROPOSED SITE PLAN  
1/8" = 1'-0"

### SITE/BUILDING INFORMATION:

PROJECT NAME	ABC LEARNING MONTESSORI
PROJECT LOCATION	2510 KLEIN ROAD, SAN JOSE, CA 95148
OWNER	ABC LEARNING MONTESSORI
DESIGNER	KDA ASSOCIATES, INC.
DATE	10/1/14
SCALE	1/8" = 1'-0"
SHEET	1 OF 1

3 SECTION 2  
1/8" = 1'-0"



Key Value	Key Legend
1	EXISTING BUILDING
2	EXISTING PARKING LOT
3	EXISTING DRIVEWAY
4	EXISTING SIDEWALK
5	EXISTING CURB
6	EXISTING STREET LIGHT
7	EXISTING TREE
8	EXISTING FENCE
9	EXISTING DRIVEWAY

Key Value	Key Legend
10	PROPOSED BUILDING
11	PROPOSED PARKING LOT
12	PROPOSED DRIVEWAY
13	PROPOSED SIDEWALK
14	PROPOSED CURB
15	PROPOSED STREET LIGHT
16	PROPOSED TREE
17	PROPOSED FENCE
18	PROPOSED DRIVEWAY

ABC Learning Montessori

2510 KLEIN ROAD  
SAN JOSE, CA 95148

KDA  
KID DESIGN + ARCHITECTURE  
3000 KLEIN ROAD  
SAN JOSE, CA 95148  
408.437.1234  
KDA@KDAARCHITECTURE.COM

SITE PLANS

DATE: 10/1/14  
SCALE: 1/8" = 1'-0"  
SHEET: 1 OF 1

2

## On-Site Circulation

The proposed site plan shows a 15-foot wide one-way drive aisle with two parallel parking spaces connecting the inbound and outbound driveways. The aisle width exceeds the City's required minimum width for a one-way aisle (Section 20.90.100). On the south edge of the property, eight 90 degree parking spaces would be provided. The drive aisle through the parking area is shown at 26 feet in width, which would meet the City's requirement for minimum width of a two-way aisle and would provide sufficient room for vehicles to back out of the parking spaces.

The current site plan shows that there would be an offset between the inbound driveway and the two-way drive aisle in the parking lot. The vehicles entering from the inbound driveway would potentially conflict with the path of the exiting vehicles from the parking lot. To improve the circulation of the vehicles on site it is recommended that the inbound driveway should be moved further south so that it would be aligned with the inbound direction of the two-way aisle in the parking lot. The site plan shows that an accessible parking space would be located at an end stall. A maneuvering area of at least 4 feet should be provided between the end stall and any obstacles such as a raised sidewalk or fence to facilitate vehicles entry and exit at this location.

## Parking

The parking for the proposed project was evaluated based on the City of San Jose parking code. Based on the City's requirements (Section 20.90.060: Day Care Center), one parking space should be provided per 6 children, up to 5 spaces and thereafter 1 per 10 children (includes employee parking). The proposed day care would have an enrollment up to 68 children and 5 employees, which yields a minimum requirement of 9 parking spaces. Based on the July 14, 2014 site plan, the project would provide a total of 10 parking spaces with 2 parallel parking spaces, 7 regular 90-degree parking spaces, and 1 accessible parking space. Thus, the total parking provided would meet the City's requirement. With one exception, the parking stall dimensions meet the City's standards. The parallel parking stalls are adequate in width (8 feet), however the length shown (18 feet) falls short of the City's requirements (21 feet for uniform car spaces).

The City's municipal code requires one bike parking space for every 10 full-time employees and children. This yields a minimum requirement of 8 bicycle spaces. The current site plan does not designate biking parking spaces. The proposed project would need to provide 8 bicycle parking spaces to comply with the City's standards.

Per City's Zoning Code (Section 20.90.410), for a development less than 10,000 square feet, off-street loading spaces are not required. Commercial vehicles/delivery trucks would be able to use the on-street parking spaces on Klein Road or enter the site and park in the parallel spaces in front. It is recommended that employees park on the side and that the parallel spaces in front be designated for short-term parking for deliveries and student drop-off and pick up.

## Conclusions

The project trips generated by the proposed project are fairly low and would not cause a significant impact to the surrounding roadway systems or neighborhood traffic conditions.

The site access/ on-site circulation and parking review indicates that some improvements would be necessary to meet the City's standards and to facilitate vehicle parking maneuvers on site.

- Reduce the width of the inbound driveway width to 12 feet.
- Relocate the inbound driveway to align with the two-way drive aisle.
- Increase the length of the parallel parking spaces to a minimum of 21 feet.

# **Appendix A**

## **Traffic Counts**

# AM Peak-Hour Volume Count Worksheet

Date: 8/26/14  
 Counter: Patti and Jo  
 Intersection Name: Klein Road and Murillo Ave  
 Weather: Clear San Jose

AUTO-CENSUS  
 Traffic Monitoring and Analysis  
 870 Castlewood Dr. #1  
 Los Gatos, CA 95032  
 Phone 408-826-9673 Fax 408-877-1625

Start Time	Klein Road			Murillo Ave			Klein Road			Murillo Ave		
	North Approach			East Approach			South Approach			West Approach		
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0
7:15	4	0	0	4	0	5	0	5	1	10	11	21
7:30	9	1	0	10	0	9	0	9	2	28	30	60
7:45	16	1	0	17	0	9	0	9	2	38	40	80
8:00	22	1	0	23	0	14	0	14	2	47	49	96
8:15	29	1	0	30	1	17	0	18	2	59	61	120
8:30	39	2	0	41	1	19	0	20	2	65	67	132
8:45	46	2	0	48	1	21	1	23	2	76	78	154
9:00	50	2	0	52	1	26	1	28	2	88	90	178

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	22	1	0	23	0	14	0	14	2	0	47	49	111
7:15 - 8:15	25	1	0	26	1	12	0	13	1	0	49	50	120
7:30 - 8:30	30	1	0	31	1	10	0	11	0	0	37	37	113
7:45 - 8:45	30	1	0	31	1	12	1	14	0	0	38	38	115
8:00 - 9:00	28	1	0	29	1	12	1	14	0	0	41	41	116
Peak Volumes:	25	1	0	26	1	12	0	13	1	0	49	50	120

Cut and Paste	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
	49	0	1	0	1	25	13	5	13	0	12	1

Murillo Ave				Klein Road				Murillo Ave			
Out	In	Total		Out	In	Total		Out	In	Total	
14	26	40		14	26	40		14	26	40	
Right	Thru	Left		Right	Thru	Left		Right	Thru	Left	
25	1	0		25	1	0		25	1	0	
86	31	117		86	31	117		86	31	117	
Right	Thru	Left		Right	Thru	Left		Right	Thru	Left	
13	5	13		13	5	13		13	5	13	
Out	In	Total		Out	In	Total		Out	In	Total	
49	0	1		49	0	1		49	0	1	
Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
14	50	64		14	50	64		14	50	64	
Out	In	Total		Out	In	Total		Out	In	Total	
14	50	64		14	50	64		14	50	64	



# PM Peak-Hour Volume Count Worksheet

Date: 8/26/14  
 Counter: Patti and Jo  
 Intersection Name: Klein Road and Murillo Ave  
 Weather: Clear San Jose

AUTO-CENSUS  
 Traffic Monitoring and Analysis  
 870 Castlewood Dr. #1  
 Los Gatos, CA 95032  
 Phone 408-826-9673 Fax 408-877-1625

Start Time	Klein Road				Murillo Ave				Klein Road				Murillo Ave			
	North Approach		East Approach		South Approach		West Approach		North Approach		East Approach		South Approach		West Approach	
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	2	0	0	2	0	0	0	0	0	0	4	4	6	0	2	8
4:30	2	1	0	3	1	1	0	2	0	0	7	7	14	3	4	21
4:45	3	1	0	4	1	2	0	3	0	0	11	11	17	5	7	29
5:00	6	1	0	7	1	3	0	4	0	0	17	17	28	7	11	46
5:15	8	1	0	9	1	4	0	5	0	0	24	24	34	10	17	61
5:30	8	1	0	9	2	8	0	10	0	0	29	29	40	16	19	75
5:45	9	2	0	11	2	11	0	13	0	0	37	37	46	19	31	96
6:00	11	2	0	13	2	12	0	14	0	0	39	39	59	20	34	113

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour	
4:00 - 5:00	6	1	0	7	1	3	0	4	0	0	17	17	28	74
4:15 - 5:15	6	1	0	7	1	4	0	5	0	0	20	20	28	85
4:30 - 5:30	6	0	0	6	1	7	0	8	0	0	22	22	26	90
4:45 - 5:45	6	1	0	7	1	9	0	10	0	0	26	26	29	110
5:00 - 6:00	5	1	0	6	1	9	0	10	0	0	22	22	31	105
Peak Volumes:	6	1	0	7	1	9	0	10	0	0	26	26	29	110

Cut and Paste	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
	26	0	0	0	1	6	24	14	29	0	9	1

Murillo Ave				Klein Road				Murillo Ave			
Out	In	Total		Out	In	Total		Out	In	Total	
41	67	108		25	7	32		24	10	34	
Right	Thru	Left		Right	Thru	Left		Right	Thru	Left	
29	14	24		6	1	0		1	9	10	
26	0	0		30	26	56		0	0	0	
Left	Thru	Right		Out	In	Total		Right	Thru	Left	
30	26	56		0	0	0		14	14	28	
Out	In	Total		Right	Thru	Left		14	10	24	



Klein Rd.:  
S/O Murillo:  
San Jose:

Site:  
Date: 8/27/2014  
000000000000  
Wednesday

24 Hour Volume										
	Begin	Southbo und	Northbo und	Combined		Begin	Southbo und	Northbo und	Combined	
	12:00 AM	0	4	2	10	12:00 PM	2	21	6	45
	12:15 AM	2		2	4	12:15 PM	3		4	7
	12:30 AM	1		2	3	12:30 PM	9		2	11
	12:45 AM	1		0	1	12:45 PM	7		12	19
	1:00 AM	2	5	2	6	1:00 PM	13	31	10	27
	1:15 AM	2		2	4	1:15 PM	5		3	8
	1:30 AM	0		1	1	1:30 PM	6		7	13
	1:45 AM	1		2	3	1:45 PM	7		7	14
	2:00 AM	1	4	0	0	2:00 PM	6	35	5	26
	2:15 AM	2		0	2	2:15 PM	11		10	21
	2:30 AM	1		0	1	2:30 PM	10		4	14
	2:45 AM	0		0	0	2:45 PM	8		7	15
	3:00 AM	2	2	0	1	3:00 PM	5	32	6	21
	3:15 AM	0		0	0	3:15 PM	3		4	7
	3:30 AM	0		1	1	3:30 PM	14		5	19
	3:45 AM	0		0	0	3:45 PM	10		6	16
	4:00 AM	0	1	0	2	4:00 PM	9	31	4	27
	4:15 AM	0		1	1	4:15 PM	7		8	15
	4:30 AM	1		1	2	4:30 PM	8		10	18
	4:45 AM	0		0	0	4:45 PM	11		5	16
	5:00 AM	1	2	4	15	5:00 PM	18	48	4	26
	5:15 AM	1		4	5	5:15 PM	9		7	16
	5:30 AM	0		0	0	5:30 PM	7		9	16
	5:45 AM	0		7	7	5:45 PM	14		6	20
	6:00 AM	1	10	5	32	6:00 PM	9	48	3	20
	6:15 AM	1		6	7	6:15 PM	15		7	22
	6:30 AM	4		10	14	6:30 PM	9		5	14
	6:45 AM	4		11	15	6:45 PM	15		5	20
	7:00 AM	4	15	10	50	7:00 PM	21	47	5	24
	7:15 AM	5		16	21	7:15 PM	11		4	15
	7:30 AM	4		14	18	7:30 PM	7		6	13
	7:45 AM	2		10	12	7:45 PM	8		9	17
	8:00 AM	2	18	16	33	8:00 PM	7	31	4	15
	8:15 AM	6		5	11	8:15 PM	8		3	11
	8:30 AM	3		3	6	8:30 PM	10		5	15
	8:45 AM	7		9	16	8:45 PM	6		3	9
	9:00 AM	2	15	6	34	9:00 PM	8	23	1	7
	9:15 AM	5		6	11	9:15 PM	6		0	6
	9:30 AM	5		7	12	9:30 PM	4		4	8
	9:45 AM	3		15	18	9:45 PM	5		2	7
	10:00 AM	8	17	10	27	10:00 PM	5	23	1	6
	10:15 AM	4		3	7	10:15 PM	9		0	9
	10:30 AM	3		7	10	10:30 PM	6		4	10
	10:45 AM	2		7	9	10:45 PM	3		1	4
	11:00 AM	4	15	2	22	11:00 PM	3	9	0	4
	11:15 AM	3		6	9	11:15 PM	2		1	3
	11:30 AM	2		6	8	11:30 PM	3		3	6
	11:45 AM	6		8	14	11:45 PM	1		0	1
	24 Hour Volume				Southbo und 487 (51.7%)	Northbo und 455 (48.3%)	Combined 942			
	Count	108	228	336		Count	379	227	606	
	Peak Hour	32.1 %	67.9 %			Peak Hour	62.5 %	37.5 %		
	Volume	9:15 AM	7:15 AM	7:15 AM		Volume	6:15 PM	12:45 PM	6:15 PM	
	Factor	21	56	69		Factor	60	32	82	
		0.66	0.88	0.82			0.71	0.67	0.79	

Klein Rd.:  
s/o Murillo:  
San Jose:

Site: 000000000000  
Date: 8/28/2014  
Thursday

24 Hour Volume									
Begin	Southbound	Northbound	Combined		Begin	Southbound	Northbound	Combined	
12:00 AM	1	0	1	13	12:00 PM	4	4	8	26
12:15 AM	5	2	7		12:15 PM	5	5	10	
12:30 AM	1	1	2		12:30 PM	3	2	5	
12:45 AM	1	2	3	8	12:45 PM	0	3	3	45
1:00 AM	0	0	0		1:00 PM	4	4	8	
1:15 AM	2	2	4		1:15 PM	6	3	9	
1:30 AM	1	0	1		1:30 PM	9	8	17	
1:45 AM	2	1	3	4	1:45 PM	4	7	11	
2:00 AM	0	0	0		2:00 PM	3	3	6	44
2:15 AM	1	0	1		2:15 PM	5	7	12	
2:30 AM	2	1	3		2:30 PM	5	9	14	
2:45 AM	0	0	0		2:45 PM	6	6	12	
3:00 AM	0	0	0	2	3:00 PM	5	4	9	51
3:15 AM	0	0	0		3:15 PM	10	5	15	
3:30 AM	0	1	1		3:30 PM	10	2	12	
3:45 AM	0	0	0		3:45 PM	9	6	15	
4:00 AM	0	0	0	2	4:00 PM	12	7	19	54
4:15 AM	0	1	1		4:15 PM	6	4	10	
4:30 AM	0	1	1		4:30 PM	6	7	13	
4:45 AM	0	0	0		4:45 PM	7	5	12	
5:00 AM	0	1	1	11	5:00 PM	13	1	14	69
5:15 AM	0	2	2		5:15 PM	15	4	19	
5:30 AM	0	1	1		5:30 PM	6	10	16	
5:45 AM	1	3	4	38	5:45 PM	15	5	20	
6:00 AM	1	4	5		6:00 PM	10	4	14	66
6:15 AM	3	5	8		6:15 PM	7	4	11	
6:30 AM	4	10	14		6:30 PM	12	8	20	
6:45 AM	4	7	11	48	6:45 PM	17	4	21	
7:00 AM	2	9	11		7:00 PM	13	2	15	67
7:15 AM	1	18	19		7:15 PM	16	4	20	
7:30 AM	0	11	11		7:30 PM	7	11	18	
7:45 AM	2	5	7	74	7:45 PM	9	5	14	58
8:00 AM	6	19	25		8:00 PM	8	4	12	
8:15 AM	6	7	13		8:15 PM	9	7	16	
8:30 AM	6	17	23		8:30 PM	7	5	12	
8:45 AM	2	11	13	44	8:45 PM	9	9	18	
9:00 AM	2	29	31		9:00 PM	9	5	14	40
9:15 AM	3	8	11		9:15 PM	4	4	8	
9:30 AM	7	6	13		9:30 PM	7	1	8	
9:45 AM	3	8	11	24	9:45 PM	7	3	10	
10:00 AM	3	19	22		10:00 PM	1	3	4	24
10:15 AM	5	8	13		10:15 PM	6	3	9	
10:30 AM	1	4	5		10:30 PM	4	3	7	
10:45 AM	0	4	4		10:45 PM	1	3	4	
11:00 AM	6	22	28		11:00 PM	5	3	8	21
11:15 AM	6	6	12		11:15 PM	2	2	4	
11:30 AM	3	7	10		11:30 PM	2	1	3	
11:45 AM	2	6	8		11:45 PM	3	3	6	

24 Hour Volume Southbound und 438 (50.0%) Northbound und 438 (50.0%) Combined 876

12:00 AM - 12:00 PM					12:00 PM - 12:00 AM				
Count	Southbound und	Northbound und	Combined		Southbound und	Northbound und	Combined		
95	95	216	311		343	222	565		
Peak Hour	30.5 %	69.5 %			60.7 %	39.3 %			
Volume	7:45 AM	8:00 AM	8:00 AM		6:30 PM	7:30 PM	6:30 PM		
Factor	20	54	74		58	27	76		
	0.83	0.71	0.74		0.85	0.61	0.90		

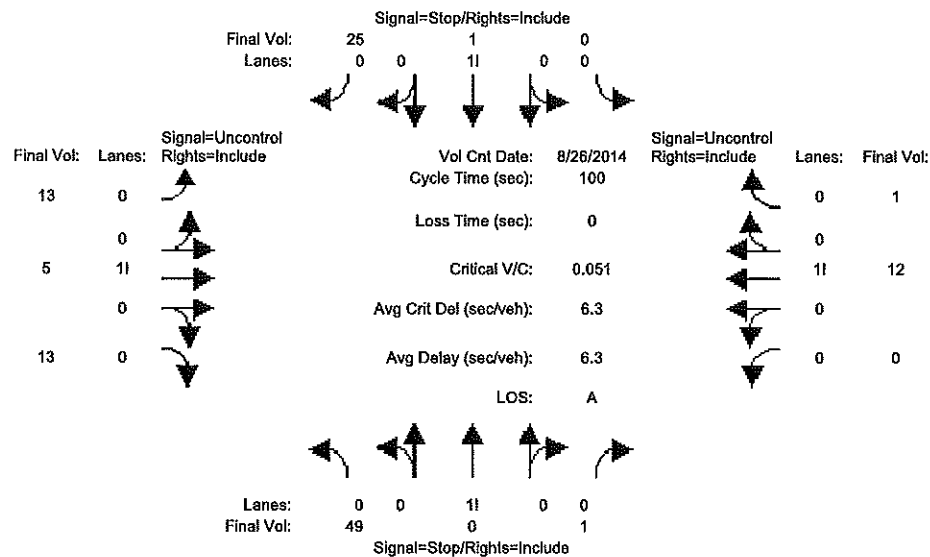
**Appendix B**

**Intersection Level of Service Calculation Sheets**

Day Care Center - 2510 Klein Road  
City of San Jose

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Existing (AM)

Intersection #1: Klein Rd & Murillo Ave



Street Name: Klein Rd Murillo Ave

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 26 Aug 2014 << 8:00-9:00 AM												
Base Vol:	49	0	1	0	1	25	13	5	13	0	12	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	0	1	0	1	25	13	5	13	0	12	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	0	1	0	1	25	13	5	13	0	12	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	0	1	0	1	25	13	5	13	0	12	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	49	0	1	0	1	25	13	5	13	0	12	1
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	xxxxx	6.5	6.2	4.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	4.0	3.3	2.2	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Capacity Module:												
Cnflct Vol:	63	51	12	xxxxx	57	13	13	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Potent Cap.:	936	845	1075	xxxxx	838	1074	1619	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Move Cap.:	908	838	1075	xxxxx	832	1074	1619	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Total Cap:	960	860	xxxxx	973	855	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Volume/Cap:	0.05	0.00	0.00	xxxxx	0.00	0.02	0.01	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Level Of Service Module:												
2Way95thQ:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Control Del:xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	7.2	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxxx	962	xxxxx	xxxxx	xxxxx	1063	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
SharedQueue:xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shrd ConDel:xxxxx	xxxxx	8.9	xxxxx	xxxxx	xxxxx	8.5	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shared LOS:	*	A	*	*	*	A	*	*	*	*	*	*
ApproachDel:	8.9			8.5			xxxxxxx			xxxxxxx		
ApproachLOS:	A			A			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*  
Intersection #1 Klein Rd & Murillo Ave  
\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	1	0	0	0	0	0	1	0	0	0
Initial Vol:	49	0	1	0	1	25	13	5	13	0	12	1
ApproachDel:	8.9			8.5			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=120]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=26]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=120]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

#### SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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#### Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*

Intersection #1 Klein Rd & Murillo Ave

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	1	0	0	0	0	0	1	0	0	0
Initial Vol:	49	0	1	0	1	25	13	5	13	0	12	1

Major Street Volume: 44

Minor Approach Volume: 50

Minor Approach Volume Threshold: 1052

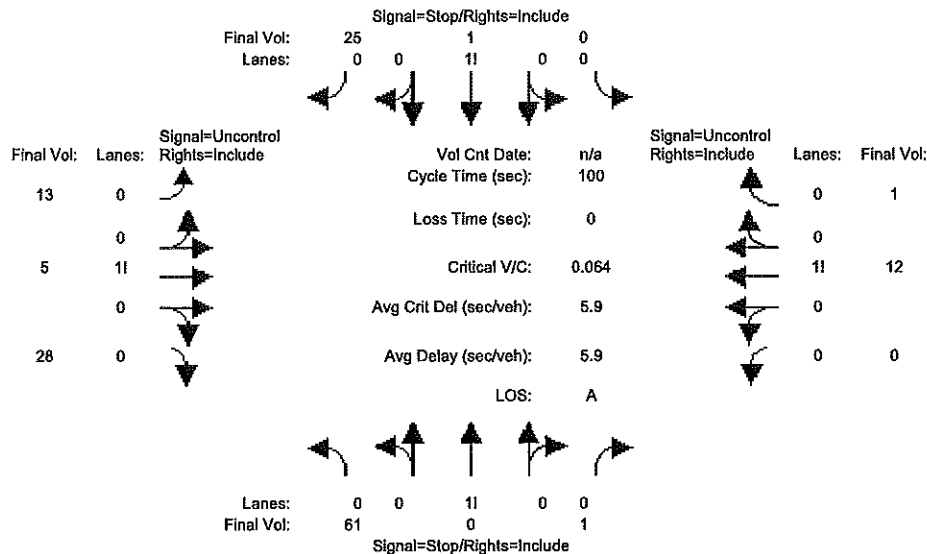
#### SIGNAL WARRANT DISCLAIMER

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Day Care Center - 2510 Klein Road  
City of San JoseLevel Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Ex+Proj AM

## Intersection #1: Klein Rd &amp; Murillo Ave



Street Name: Klein Rd Murillo Ave

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module: 8:00-9:00 AM

Base Vol:	61	0	1	0	1	25	13	5	28	0	12	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	0	1	0	1	25	13	5	28	0	12	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	0	1	0	1	25	13	5	28	0	12	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	0	1	0	1	25	13	5	28	0	12	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	61	0	1	0	1	25	13	5	28	0	12	1

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	xxxxx	6.5	6.2	4.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	4.0	3.3	2.2	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx

Capacity Module:

Cnflct Vol:	71	58	19	xxxx	72	13	13	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	926	837	1065	xxxx	823	1074	1619	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	898	830	1065	xxxx	816	1074	1619	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	959	854	xxxxx	964	842	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	0.00	0.00	xxxx	0.00	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx

Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 7.2 xxxxx xxxxx xxxxx xxxxx xxxxx

LOS by Move: \* \* \* \* \* A \* \* \* \* \*

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx 961 xxxxx xxxxx xxxxx 1063 xxxxx xxxxx xxxxx xxxxx xxxxx

Shared Queue: xxxxx 0.2 xxxxx xxxxx xxxxx 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd ConDel: xxxxx 9.0 xxxxx xxxxx xxxxx 8.5 xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: \* A \* \* \* A \* \* \* \* \*

ApproachDel: 9.0 8.5 xxxxxx xxxxxx

ApproachLOS: A A \* \*

Note: Queue reported is the number of cars per lane.

## Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #1 Klein Rd & Murillo Ave

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	
Initial Vol:	61		0		1	0		1		25	13		5		28	0		12		1
ApproachDel:	9.0				8.5				xxxxxx				xxxxxx							

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=62]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=147]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=26]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=147]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

#### SIGNAL WARRANT DISCLAIMER

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#### Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*

Intersection #1 Klein Rd & Murillo Ave

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled							
Lanes:	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	
Initial Vol:	61		0		1	0		1		25	13		5		28	0		12		1

Major Street Volume: 59

Minor Approach Volume: 62

Minor Approach Volume Threshold: 974

#### SIGNAL WARRANT DISCLAIMER

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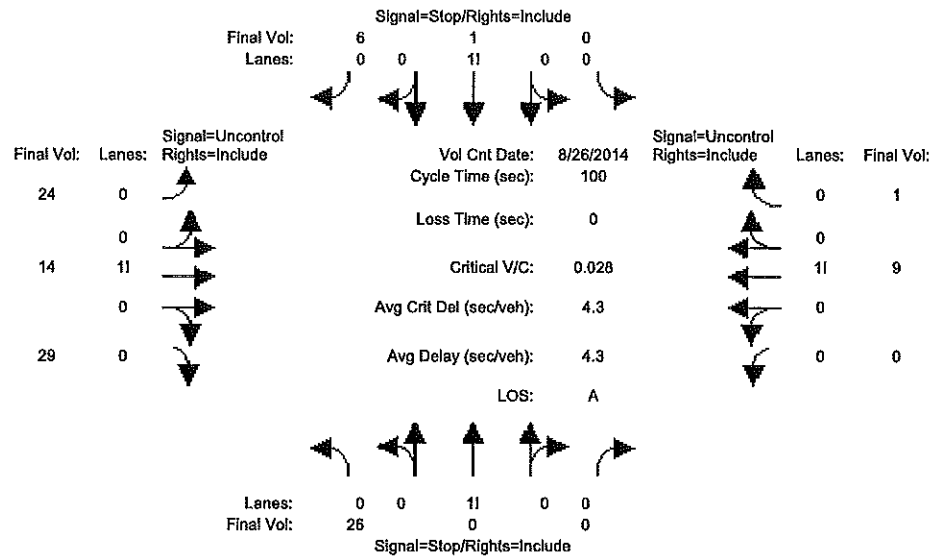
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Day Care Center - 2510 Klein Road  
City of San Jose

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Existing (PM)

Intersection #1: Klein Rd & Murillo Ave



Street Name:	Klein Rd						Murillo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 26 Aug 2014 << 4:45 - 5:45 PM	26	0	0	0	1	6	24	14	29	0	9	1
Base Vol:	26	0	0	0	1	6	24	14	29	0	9	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	0	0	0	1	6	24	14	29	0	9	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	0	0	0	1	6	24	14	29	0	9	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	0	0	0	1	6	24	14	29	0	9	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	26	0	0	0	1	6	24	14	29	0	9	1

Critical Gap Module:												
Critical Gp:	7.1	xxxx	xxxxx	xxxxx	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	xxxxx	xxxxx	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:												
Cnflict Vol:	90	xxxx	xxxxx	xxxx	101	10	10	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	900	xxxx	xxxxx	xxxx	793	1078	1623	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	884	xxxx	xxxxx	xxxx	781	1078	1623	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	923	822	xxxxx	923	811	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	1029	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	A	*	*	*	*	*	*
ApproachDel:	9.0				8.5		xxxxxx			xxxxxx		
ApproachLOS:	A				A		*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #1 Klein Rd & Murillo Ave

\*\*\*\*\*

## Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	1	0	0	0	0	0	1	0	0	0	1	0
Initial Vol:	26	0	0	0	1	6	24	14	29	0	9	1
ApproachDel:	9.0			8.5			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=26]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=110]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=7]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=110]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

## SIGNAL WARRANT DISCLAIMER

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## Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*

Intersection #1 Klein Rd & Murillo Ave

\*\*\*\*\*

## Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	1	0	0	0	0	0	1	0	0	0	0	1
Initial Vol:	26	0	0	0	1	6	24	14	29	0	9	1

Major Street Volume: 77

Minor Approach Volume: 26

Minor Approach Volume Threshold: 903

## SIGNAL WARRANT DISCLAIMER

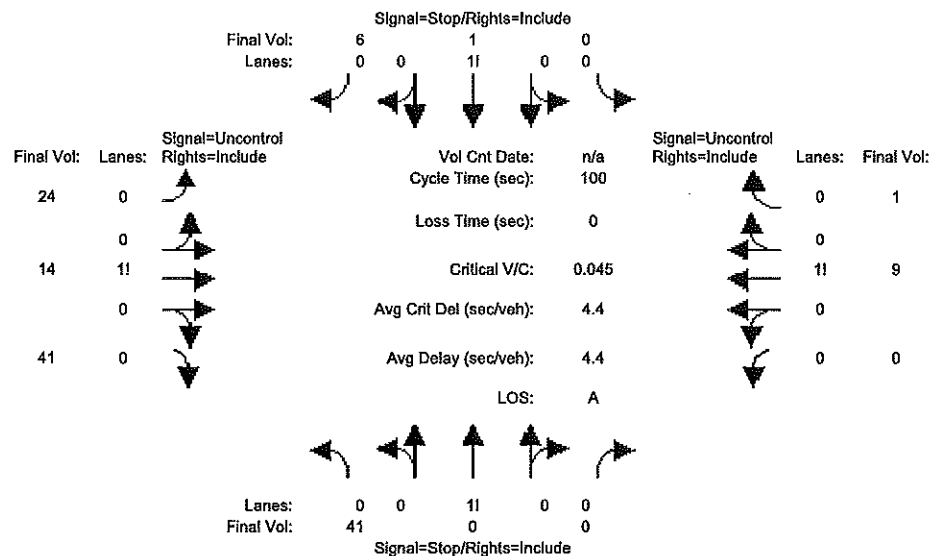
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Day Care Center - 2510 Klein Road  
City of San Jose

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Ex+Proj PM

## Intersection #1: Klein Rd &amp; Murillo Ave



Street Name:	Klein Rd						Murillo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: 4:45 - 5:45 PM												
Base Vol:	41	0	0	0	1	6	24	14	41	0	9	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	0	0	0	1	6	24	14	41	0	9	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	0	0	0	1	6	24	14	41	0	9	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	0	0	0	1	6	24	14	41	0	9	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	41	0	0	0	1	6	24	14	41	0	9	1

Critical Gap Module:												
Critical Gp:	7.1	xxxx	xxxxx	xxxxx	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	xxxxx	xxxxx	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:												
Cnflct Vol:	96	xxxx	xxxxx	xxxx	113	10	10	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	892	xxxx	xxxxx	xxxx	781	1078	1623	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	876	xxxx	xxxxx	xxxx	770	1078	1623	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	916	818	xxxxx	916	801	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	1027	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	A	*	*	*	*	*	*
ApproachDel:	9.1					8.5	xxxxxx			xxxxxx		
ApproachLOS:	A					A	*			*		

Note: Queue reported is the number of cars per lane.

## Peak Hour Delay Signal Warrant Report

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## Intersection #1 Klein Rd &amp; Murillo Ave

\*\*\*\*\*

## Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	1	0	0	0	0	0	1	0	0	0	1	0
Initial Vol:	41	0	0	0	1	6	24	14	41	0	9	1
ApproachDel:	9.1			8.5			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=41]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=137]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=7]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=137]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

## SIGNAL WARRANT DISCLAIMER

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## Peak Hour Volume Signal Warrant Report [Urban]

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## Intersection #1 Klein Rd &amp; Murillo Ave

\*\*\*\*\*

## Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	1	0	0	0	0	0	1	0	0	0	0	1
Initial Vol:	41	0	0	0	1	6	24	14	41	0	9	1

Major Street Volume: 89

Minor Approach Volume: 41

Minor Approach Volume Threshold: 865

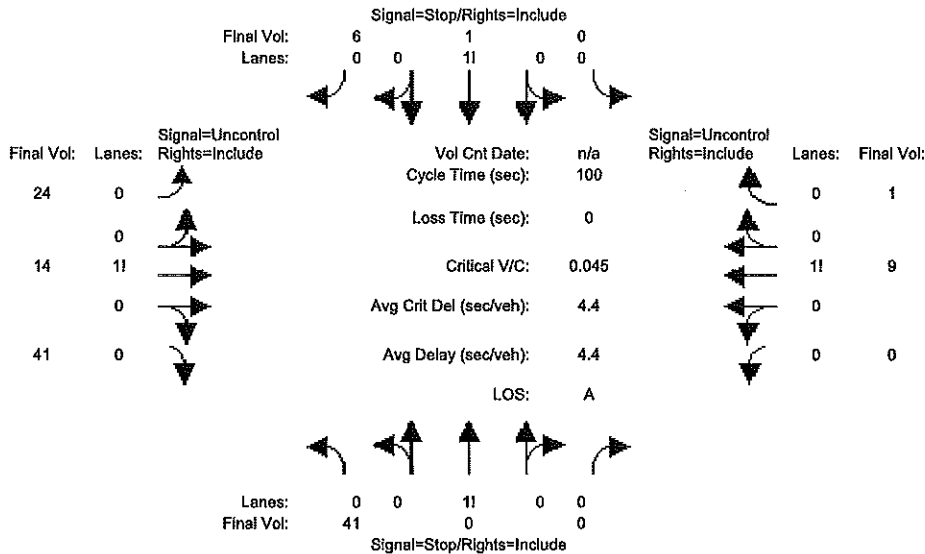
## SIGNAL WARRANT DISCLAIMER

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Day Care Center - 2510 Klein Road  
City of San JoseLevel Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Ex+Proj PM

## Intersection #1: Klein Rd &amp; Murillo Ave



Street Name:	Klein Rd						Murillo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: 4:45 - 5:45 PM												
Base Vol:	41	0	0	0	1	6	24	14	41	0	9	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	0	0	0	1	6	24	14	41	0	9	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	0	0	0	1	6	24	14	41	0	9	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	0	0	0	1	6	24	14	41	0	9	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	41	0	0	0	1	6	24	14	41	0	9	1

Critical Gap Module:												
Critical Gp:	7.1	xxxx	xxxxxx	xxxxxx	6.5	6.2	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	3.5	xxxx	xxxxxx	xxxxxx	4.0	3.3	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Capacity Module:												
Cnflct Vol:	96	xxxx	xxxxxx	xxxxxx	113	10	10	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	892	xxxx	xxxxxx	xxxxxx	781	1078	1623	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	876	xxxx	xxxxxx	xxxxxx	770	1078	1623	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Total Cap:	916	818	xxxxxx	xxxxxx	916	801	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.04	xxxx	xxxxxx	xxxxxx	0.00	0.01	0.01	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
Control Del:	9.1	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	7.3	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	1027	xxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
SharedQueue:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	0.0	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	8.5	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
Shared LOS:	*	*	*	*	*	A	*	*	*	*	*	*
ApproachDel:	9.1					8.5	xxxxxx			xxxxxx		
ApproachLOS:	A					A	*			*		

Note: Queue reported is the number of cars per lane.

## Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

## Intersection #1 Klein Rd &amp; Murillo Ave

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	1	0	0	0	0	0	1	0	0	0	1	0
Initial Vol:	41	0	0	0	1	6	24	14	41	0	9	1
ApproachDel:	9.1			8.5			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=41]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=137]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=7]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=137]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

#### SIGNAL WARRANT DISCLAIMER

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#### Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*

Intersection #1 Klein Rd & Murillo Ave

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	1	0	0	0	0	0	1	0	0	0	1	0
Initial Vol:	41	0	0	0	1	6	24	14	41	0	9	1
Major Street Volume:	89											
Minor Approach Volume:	41											
Minor Approach Volume Threshold:	865											

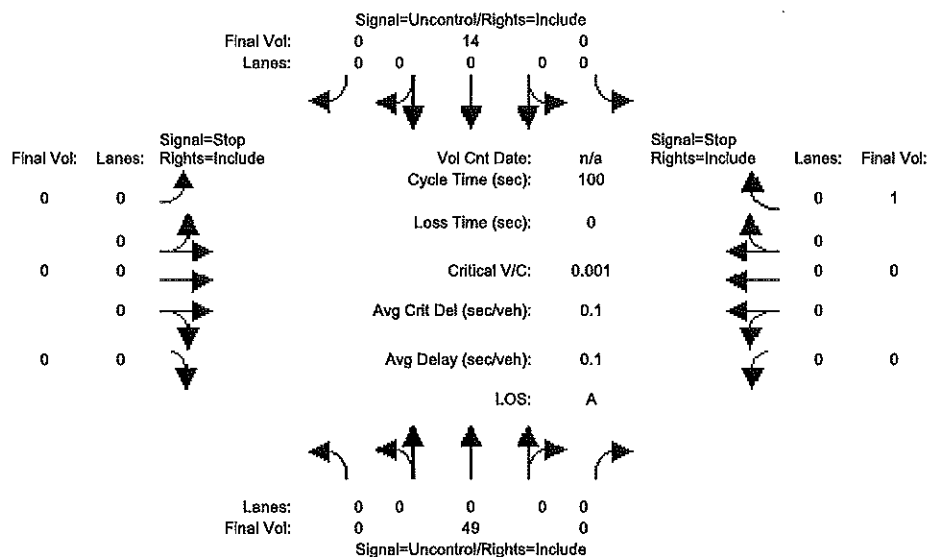
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Day Care Center - 2510 Klein Road  
City of San JoseLevel Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Existing (AM)

## Intersection #2: Klein Rd &amp; Proj Driveway



Street Name:	Klein Rd						Proj Driveway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	49	0	0	14	0	0	0	0	0	0	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	49	0	0	14	0	0	0	0	0	0	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	49	0	0	14	0	0	0	0	0	0	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	49	0	0	14	0	0	0	0	0	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	49	0	0	14	0	0	0	0	0	0	1

Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3

Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	49
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1025
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1025
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00

Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.5
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	A
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxx	xxxxxx	xxxx	xxxxx	xxxxxx	xxxx	xxxxx	xxxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx					8.5
ApproachLOS:	*			*			*					A

Note: Queue reported is the number of cars per lane.

## Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #2 Klein Rd &amp; Proj Driveway

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Lanes:	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	
Initial Vol:	0	49		0	0	14		0	0	0	0	0	0	0	1	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				8.5			

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=1]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=64]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

#### SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*  
Intersection #2 Klein Rd & Proj Driveway  
\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Lanes:	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Initial Vol:	0	49	0			0	14	0			0	0	0	0		0	0	0		1

Major Street Volume: 63

Minor Approach Volume: 1

Minor Approach Volume Threshold: 957

#### SIGNAL WARRANT DISCLAIMER

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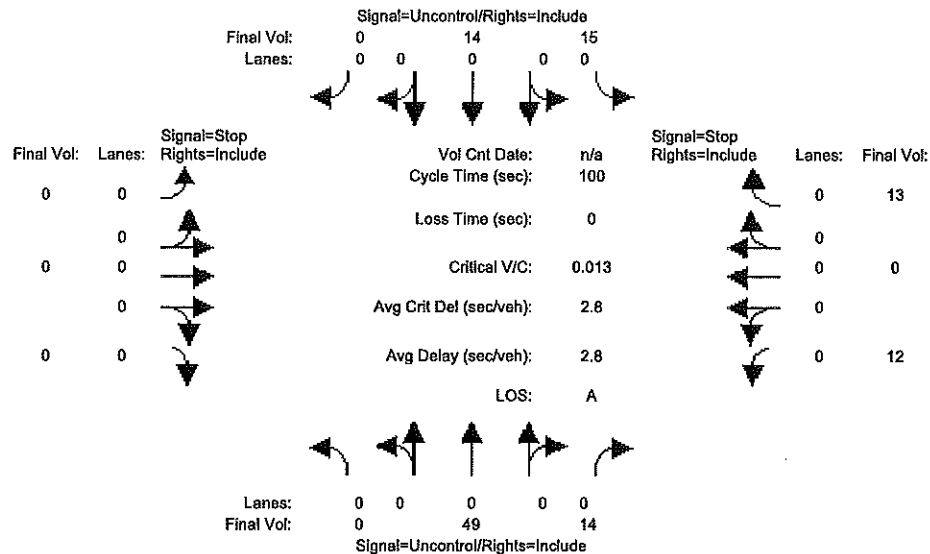
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Day Care Center - 2510 Klein Road  
City of San Jose

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Ex+Proj AM

### Intersection #2: Klein Rd & Proj Driveway



Street Name:	Klein Rd						Proj Driveway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	49	14	15	14	0	0	0	0	12	0	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	49	14	15	14	0	0	0	0	12	0	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	49	14	15	14	0	0	0	0	12	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	49	14	15	14	0	0	0	0	12	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	49	14	15	14	0	0	0	0	12	0	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	63	xxxx	xxxxx	xxxx	xxxx	xxxxx	100	100	56
Potent Cap.:	xxxx	xxxx	xxxxx	1553	xxxx	xxxxx	xxxx	xxxx	xxxxx	904	794	1016
Move Cap.:	xxxx	xxxx	xxxxx	1553	xxxx	xxxxx	xxxx	xxxx	xxxxx	897	786	1016
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	955	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.9		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

#### Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #2 Klein Rd & Proj Driveway

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 0 1 0	0 1 0 0 0	0 0 0 0 0	0 0 1 0 0
Initial Vol:	0 49 14	15 14 0	0 0 0 0	12 0 13
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	8.9

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=25]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=117]

FAIL - Total volume less than 650 for intersection  
with less than four approaches.

#### SIGNAL WARRANT DISCLAIMER

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#### Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #2 Klein Rd & Proj Driveway

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 0 1 0	0 1 0 0 0	0 0 0 0 0	0 0 1 0 0
Initial Vol:	0 49 14	15 14 0	0 0 0 0	12 0 13

Major Street Volume: 92  
Minor Approach Volume: 25  
Minor Approach Volume Threshold: 856

#### SIGNAL WARRANT DISCLAIMER

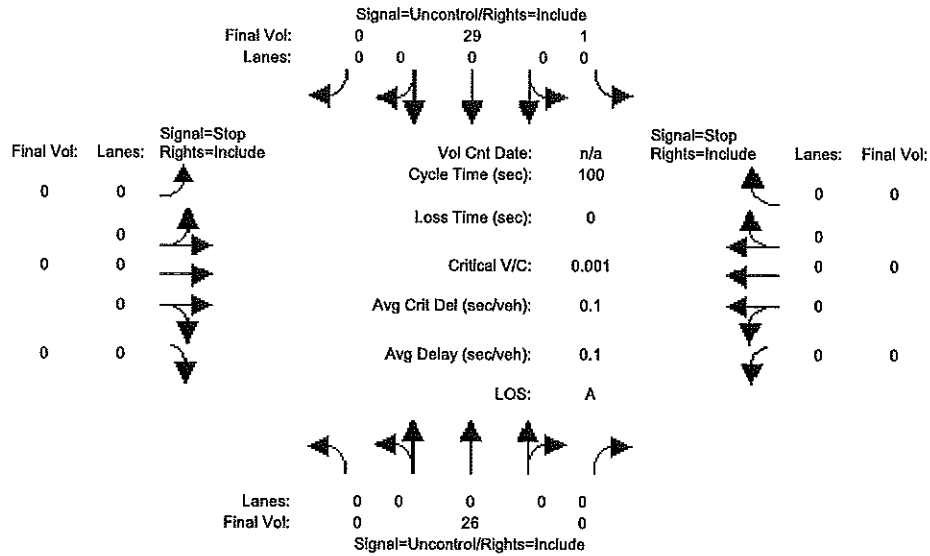
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Day Care Center - 2510 Klein Road  
City of San Jose

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Existing (PM)

Intersection #2: Klein Rd & Proj Driveway



Street Name:	Klein Rd						Proj Driveway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
----- ----- ----- -----												
Volume Module:												
Base Vol:	0	26	0	1	29	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	26	0	1	29	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	26	0	1	29	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	26	0	1	29	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	26	0	1	29	0	0	0	0	0	0	0
----- ----- ----- -----												
Critical Gap Module:												
Critical Gp:xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
----- ----- ----- -----												
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	26	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1601	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1601	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
----- ----- ----- -----												
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:xxxxx	xxxx	xxxxx		7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:xxxxx	xxxx	xxxxx		7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx		xxxxxx		xxxxxx		xxxxxx		xxxxxx		xxxxxx	
ApproachLOS:	*		*		*		*		*		*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

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Intersection #2 Klein Rd & Proj Driveway

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 1 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	0 26 0	1 29 0	0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

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## Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*

Intersection #2 Klein Rd & Proj Driveway

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 0 0	0 1 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	0 26 0	1 29 0	0 0 0	0 0 0 0

Major Street Volume: 56  
 Minor Approach Volume: 0  
 Minor Approach Volume Threshold: 988

## SIGNAL WARRANT DISCLAIMER

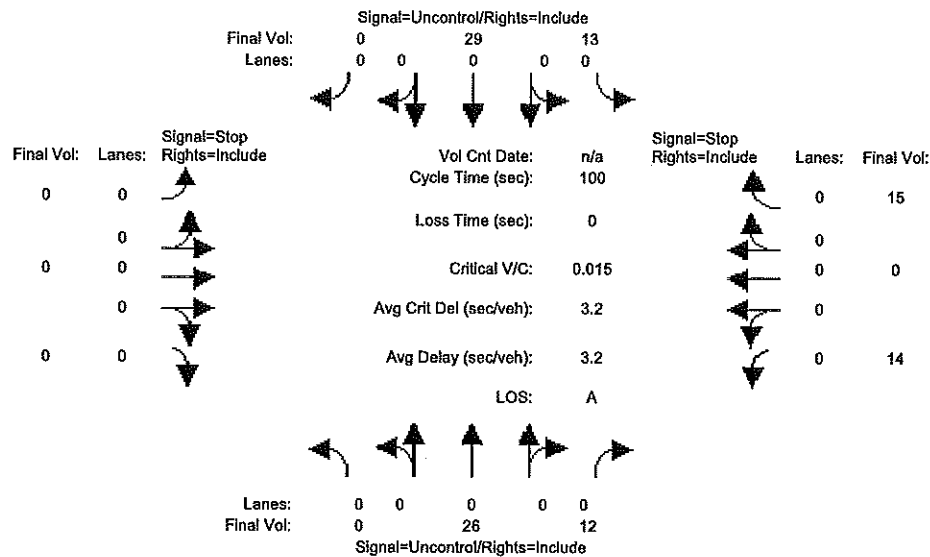
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Day Care Center - 2510 Klein Road  
City of San Jose

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
Ex+Proj PM

Intersection #2: Klein Rd & Proj Driveway



Street Name:	Klein Rd						Proj Driveway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	26	12	13	29	0	0	0	0	14	0	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	26	12	13	29	0	0	0	0	14	0	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	26	12	13	29	0	0	0	0	14	0	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	26	12	13	29	0	0	0	0	14	0	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	26	12	13	29	0	0	0	0	14	0	15
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	4.1	xxxx	xxxx	xxxx	xxxx	xxxx	6.4	6.5	6.2
FollowUpTim:	xxxx	xxxx	xxxx	2.2	xxxx	xxxx	xxxx	xxxx	xxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxx	38	xxxx	xxxx	xxxx	xxxx	xxxx	87	87	32
Potent Cap.:	xxxx	xxxx	xxxx	1585	xxxx	xxxx	xxxx	xxxx	xxxx	919	807	1048
Move Cap.:	xxxx	xxxx	xxxx	1585	xxxx	xxxx	xxxx	xxxx	xxxx	913	800	1048
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	7.3	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	978	xxxx	xxxx
SharedQueue:	xxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxx	xxxx	xxxx	0.1	xxxx	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	7.3	xxxx	xxxx	xxxx	xxxx	xxxx	8.8	xxxx	xxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.8		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #2 Klein Rd & Proj Driveway

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 0 1 0	0 1 0 0 0	0 0 0 0 0	0 0 1 0 0
Initial Vol:	0 0 26 12	13 29 0	0 0 0 0	14 0 15
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	8.8

Approach[westbound][lanes=1][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=0.1]  
FAIL - Vehicle-hours less than 4 for one lane approach.  
Signal Warrant Rule #2: [approach volume=29]  
FAIL - Approach volume less than 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=109]  
FAIL - Total volume less than 650 for intersection  
with less than four approaches.

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#### Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*

#### Intersection #2 Klein Rd & Proj Driveway

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 0 1 0	0 1 0 0 0	0 0 0 0 0	0 0 1 0 0
Initial Vol:	0 26 12	13 29 0	0 0 0 0	14 0 15

Major Street Volume: 80  
Minor Approach Volume: 29  
Minor Approach Volume Threshold: 893

#### SIGNAL WARRANT DISCLAIMER

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